

Work Order ID 54527

December 10, 2009 3:46:17 PM



Page 1

Item ID: D315-670-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Bearpaw

Start Date: 10/12/2009 Start Qty: 2.00



Cust Item ID:

Required Date: 10/12/2009 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan: *PL*

Date: *09/12/10*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2432

Rev F3

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D315-670-011 CHG001

7/8.10.11/12 *MF 09/12/30*

150

0.00



~~Identify as per dwg & Stock Location:~~

Pick kit

Packaging

Memo

0.00

Packaging

PC 5/12/09 (2)

160

0.00



QC4- 100% Inspect kits for completeness

2) 5.10.10/12

QC

Memo

0.00

Quality Control

x2

W/O: 54521		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10.01.13		FIX ROUTING FOR D315-670-011	<i>[Signature]</i>	10/01/13		<i>[Signature]</i>	<i>[Signature]</i> 10/01/13

Part No: D315-670-011 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54527

December 10, 2009 3:46:17 PM



Page 2

Item ID: D315-670-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Bearpaw

Start Date: 10/12/2009 Start Qty: 2.00



Cust Item ID:

Required Date: 18/12/2009 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

170

Identify as per dwg & Stock Location: _____

0.00

Rev A



Packaging

Memo

0.00

Packaging

10-1-12 @SD

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/01/13

MF 10-1-12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 1
4

Work Order ID: 54527



Parent Item: D315-670-011



Parent Item Name: Bearpaw

Start Date: 10/12/2009

Required Date: 18/12/2009

Comments:

Start Qty: 2.00

Required Qty: 2.00

Component Item ID/ Item Name	Replacement Item ID	Mfg Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS21042L4 Nut		Purchased	No			100	Each	3,927.000	24.0000			

S
TL

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	3927	
110507	184	
111827	3743	
15924	0	

M111827

AN4-17A Bolt		Purchased	No			160	Each	1,420.000	24.0000			
---------------------	--	-----------	----	--	--	-----	------	-----------	---------	--	--	--

S
TL

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	1420	
105653	5	
107321	10	
109061	5	
111758	400	
112314	1000	

M111758

12/14/29 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Picklist Print

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Page 2

Work Order ID: 54527

Parent Item: D315-670-011

Parent Item Name: Bearpaw

Comments:

Start Date: 10/12/2009

Required Date: 18/12/2009

Start Qty: 2.00

Required Qty: 2.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD416 Washer	240	Purchased	No			160	Each	1,933.000	48.0000		11/30/08	

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST	1933	
	108161	329	
	110523	340	
	111279	101	
	111916	482	
	112314	681	
	16941	0	

D2182B 050 Rubber Cushion	GP	Manufactured	No			160	f	357.2160	5.0000		9/12/09	
------------------------------	----	--------------	----	--	--	-----	---	----------	--------	--	---------	--

Warehouse	Location	Loc Qty	Loc Code
Main Warehouse	ST	57.216	
	28042	7.33	
	30872	0.33	
	45405	49.556	
Main Warehouse	ST410	300	
	52649	300	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

December 10, 2009 3:46:23 PM

Work Order ID: 54527

Parent Item: D315-670-011

Parent Item Name: Bearpaw

Start Date: 10/12/2009

Required Date: 18/12/2009

Start Qty: 2.00

Required Qty: 2.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2438 Clamp		Manufactured	No			160	Each	132.0000	12.0000			

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

105

46113

5

53221

100

Main Warehouse

ST456

27

52645

27

52645

D2529

Manufactured

No

160

Each

922.0000

24.0000

Washer

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

922

52745

922

52745

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

F1	49.03 C3	ADD DEC 9143
F2	01.03 28	Ø0.43 WAS Ø0.75 RF
F3	02.01 23	CLARIFY BORE DIMS RF

RELEASED
48.06.17 KE

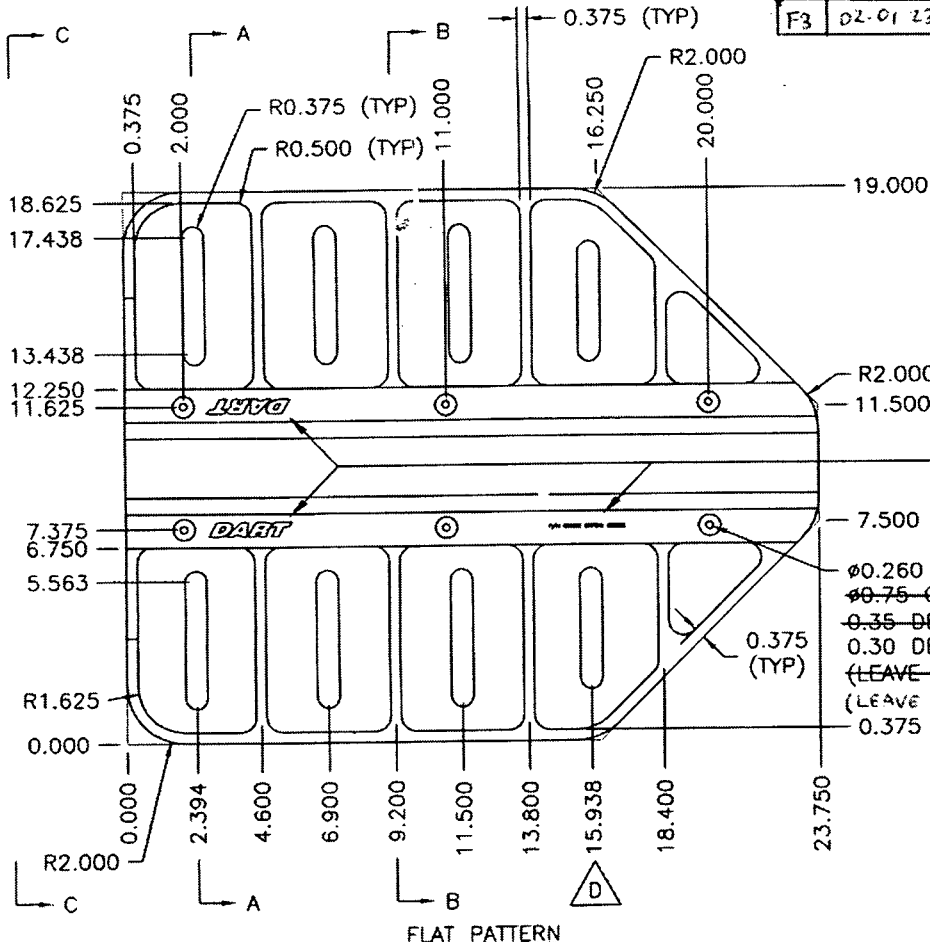
SHOWN
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
54725
10



ENGRAVE LOGO TO MAX
DEPTH OF 0.012. ENGRAVE
PART AND BATCH NUMBERS
TO MAX DEPTH OF 0.010.
(TYPICAL LOCATION AS
ILLUSTRATED)

DESIGN	DRAWN BY	DART AEROSPACE LTD
KE	KE	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
MM	KE	D2432
DATE	TITLE	SHEET 1 OF 2
98.05.12	BEARPAW	SCALE
		1:6
A	95.10.31	NEW ISSUE
B	96.01.24	RE-DESIGN
C	96.03.26	CHANGE BORE AND C'BORE DEPTH
D	96.06.04	MOVE SLOT
E	97.02.27	CHANGE C'BORE DEPTH, BORE RADIUS
F	98.05.12	CHANGE C'BORE, ADD B AND F P/N

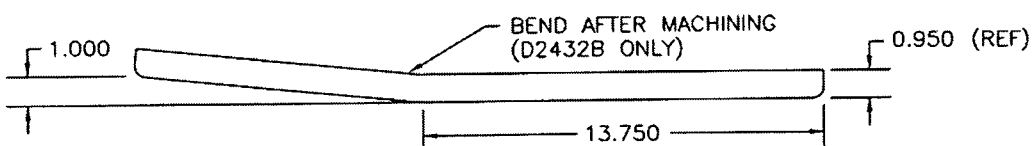
Copyright 1995 by DART AEROSPACE LTD



Ø0.260 (TYP)
Ø0.75 C'BORE ~~Ø0.43 C'BORE~~
0.35 DEEP FROM TOP (MIN.)
0.30 DEEP FROM BOTTOM
(LEAVE 0.300 MIN.)
(LEAVE 0.650 MIN.)
0.375



EFFECTIVE	DECS
9143	



D2432F: FLAT BEARPAW
D2432B: BENT BEARPAW

MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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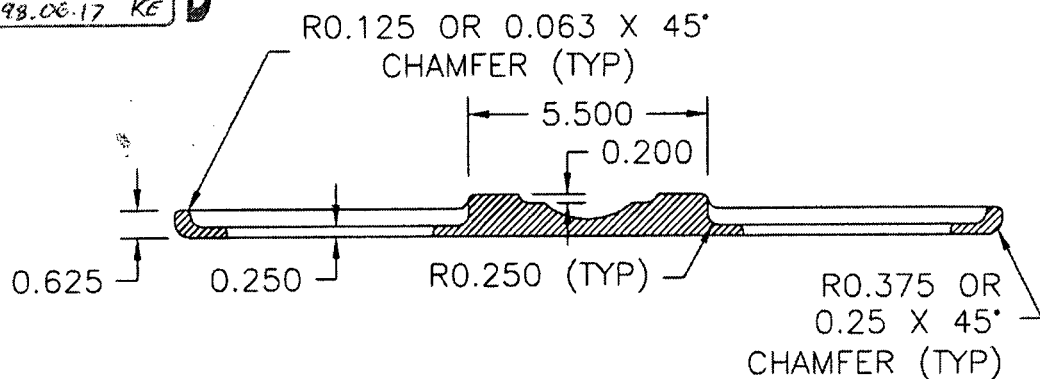
NOTE: Date & initial all entries



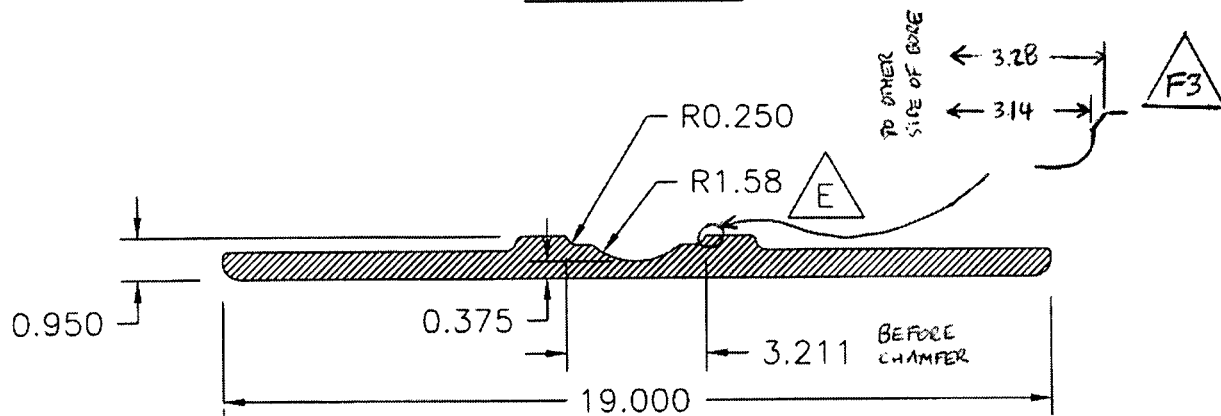
w/o 54527

DESIGN KE	DRAWN BY KE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED MEY	APPROVED [Signature]	DRAWING NO. D2432	REV. F SHEET 2 OF 2
DATE 98.05.12	TITLE BEARPAW		SCALE 1:4

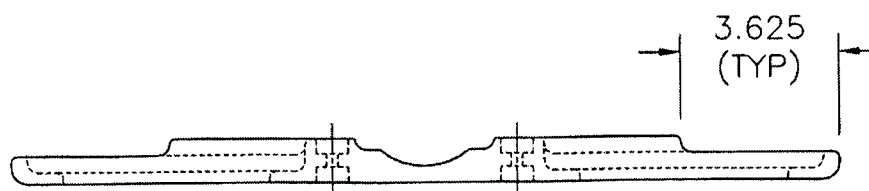
RELEASED
98.06.17 KE



SECTION A-A



SECTION B-B



SECTION C-C

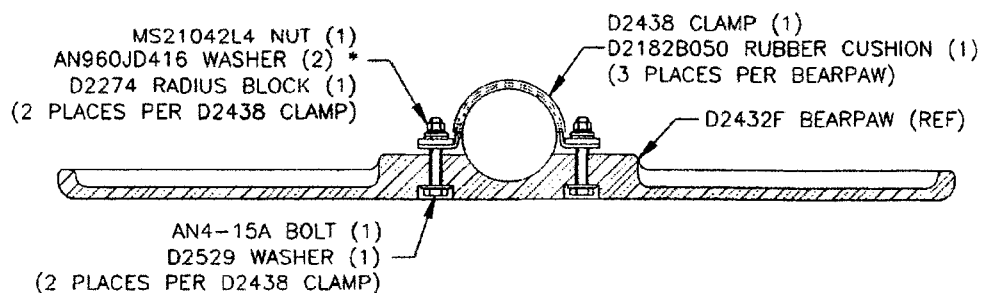
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NOTE: Date & initial all entries



* Additional AN960JD416 washers may be added to ensure 2-4 threads remaining on bolt.

Figure 3 - Bearpaw Section - Clamp Installation

4. WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D315-670-011 Bearpaw	12.5 lb 5.67 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	146.1 in 3.71 m	1826.3 in-lb 21.03 m-kg

5. PARTS LIST

Qty	Part Number	Description
X	D315-670-011	BEARPAW KIT
6	D2182B050 ✓	Rubber Cushion
12	D2274 ✓	Radius Block
2	D2432F ✓	Bearpaw
6	D2438 ✓	Clamp
12	D2529 ✓	Washer
12	AN4-17A ✓	Bolt
24	AN960JD416 ✓	Washers
12	MS21042L4 ✓	Nut (or MS21042-4)